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ABSTRACT

This publication deals with the classroom use of rate sheets as aids in teaching reading decoding skills systematically and sequentially. The introduction explains the use of rate sheets in presenting a systematic arrangement of instructional cues to which children respond for a standard period of time, and it discusses the original development of rate sheets for use in precision teaching programs. The publication then lists terms used in precision teaching, explains the use of paraprofessionals, tells how to set up student folders, and provides a sample student record sheet. Eleven sample rate sheets are presented for helping children develop skills related to the following areas: consonant blends, consonant substitution, rhyming word parts, variant vowel sounds, affixes, prefixes, word definitions, and heteronyms. (GW)

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Precision Teaching for Decoding and Comprehension: Materials and Methods

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Introduction

Precision teaching grew out of behavioral psychology as a technique to measure learning; behavior was sampled over a period of time and each observation was charted on the standard behavior chart, a semi-logarithmic graph. Increasing frequency of certain behaviors indicated learning and could be used to analyze various reinforcement schedules. By 1971 Phillips and others saw precision teaching as the classroom application of behavior modification.

Precision teachers soon found that much variation in rate of response was due to differences in the way instructional cues were given as children worked in a variety of materials. Thus rate sheets were developed on which instructional cues are standardized and arranged systematically. The arrangement and sequence of instructional cues on rate sheets then became a topic of interest in itself and teachers began to consider the value of rate sheets for skill acquisition, not just measurement.

The instructional methods which we present to you in this workshop deal with the construction and use of rate sheets. These can be used to supplement a wide variety of reading materials and do not constitute a reading program in themselves.

We share with the original precision teachers a focus on frequency of response. We attempt to structure our learning tasks through rate sheets so that children experience increasing daily frequency scores.

We feel increasing daily scores is motivating for the child and try to supplement this motivation with a great deal of verbal praise for gains made. We do not chart on semi-logarithmic scales because our primary concern is skill acquisition, not measurement. For this reason we should perhaps call our process "frequency based skill acquisition" rather than precision teaching. We use measurement only as a tool to enhance teaching and make no claims regarding our preciseness.

Terms for Precision Teaching

Precision Teaching: Standard format instruction characterized by

1. systematic arrangement of instructional cues largely taken from programmed learning.
2. continuous measurement of frequency of correct response for evaluation.
3. careful management of reinforcement contingencies.

Movement Cycle: Task to be attempted by student in one minute such as marking silent letters in a series of words.

Frequency: Number of correct responses per minute of performance.

Rate: Same as Frequency.

Rate Sheet: Sheet presenting systematic arrangement of instructional cues to which the child responds for a standard period of time.

Aim: Frequency or rate set as goal for child; that level of proficiency which the child must achieve in order to retain a skill.

Mode of Response: How the child performs the rate sheet task: can be either oral or written. The following are four standard modes of response.

Write Words: Child copies words. Child could be required to make some change, as "add-ing":

go	run	swim	write
_____	_____	_____	_____

See to Write: Child sees one word, writes something else, as "synonyms"

big	sea	ship	funny	sick
_____	_____	_____	_____	_____

See to Say: Child sees one word, says something else, as "comparatives"

big_____ _____: fast_____ _____:

high_____ _____: good_____ _____:

See to Mark: Child marks some part of word, as "silent vowels"

boat clean bread time

Reinforcement: Reward the child receives upon completing the task generally verbal praise and encouragement coupled with satisfaction of seeing score increase from previous trial.

Criterion Referenced Test: Test in which the child's performance is measured against a predetermined level of mastery rather than against group norms.

Behavioral Objective: A statement denoting an observable behavior which the student must demonstrate.

The Use of Paraprofessionals

Since many rate sheets must be administered individually, teachers can use paraprofessionals to give timings and keep records. Teachers can set up files containing sequences of rate sheets and key such sequences to objectives from whatever diagnostic tests or curricular materials are used. The teacher can then prescribe a series of rate sheets by objective number or title rather than prescribing each rate sheet.

Teachers should train paraprofessionals to:

1) set up students' individual folders

2) administer timings and give much verbal reinforcement for gains made

3) keep daily scores, or supervise students' record keeping

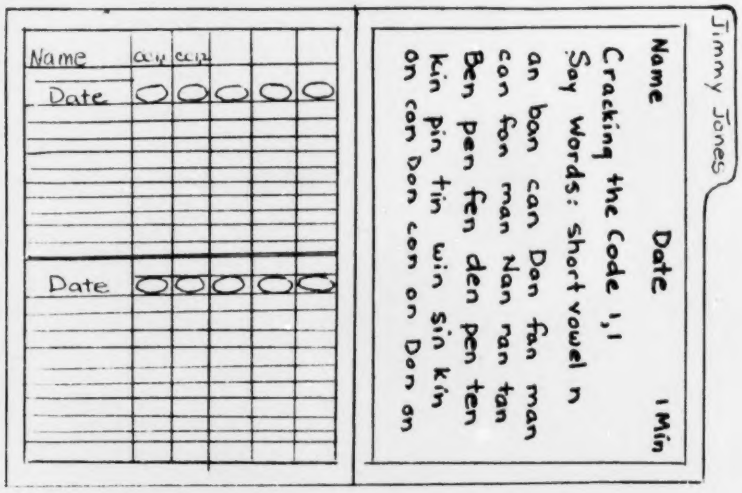
4) consult teacher when student is about to finish a rate sheet sequence or is not showing expected progress

Teachers must have daily contact with paraprofessionals to discuss problems and guide student progress.

Cross-age tutors, peer tutors, or parent volunteers can also be used to administer daily timings. In this case the teacher or trained paraprofessional should set up folders and check them daily to assure that the student is working in the correct materials and making satisfactory progress. The teacher must be aware of the students' and tutors' constant need for verbal praise or suitable rewards.

HOW TO SET UP STUDENT FOLDERS

Each student should have a manilla folder with his name on the tab. The teacher or aide should staple a student record sheet to the left side of the open folder and a series of rate sheets to the right side.



The student will need two copies of each say words sheet, one to read and one for the instructor to follow and mark errors. Before he begins work on a rate sheet he tears off one copy for the teacher or aid to use. This loose copy may be kept in the folder as long as the child is working on that sheet. The aid may prefer to keep one copy of each rate sheet in a notebook for herself and avoid the need for duplicate rate sheets in the student folder.

The student will need several copies of each rate sheet on which he marks or writes his response since each may be used only once and is then discarded. To save paper, rate sheets may be covered with plastic and the student may write on them with erasable pen.

Name _____

School _____

Date	Movement Cycle	Movement Cycle	Movement Cycle	Movement Cycle	Movement Cycle
	Aim	Aim	Aim	Aim	Aim
Date					

Name_____ Date_____ Time 1 min._____

Checked by_____ Count_____ Errors_____ Correct_____

SAY WORDS: Consonant blends - sc, sk, sl, sm, sn, sp, st, sw

scat	scooter	scale	scar	scold	scout	scare	scooter	scar	scout	(10)
sky	skit	sky	skirt	skiff	skirt	sky	skiff	skit	skirt	(20)
slop	slide	slam	slate	sled	slap	slate	slide	slap	slop	(30)
small	smash	smile	smoke	smug	smart	smell	smoke	smug	smile	(40)
snail	snake	sniff	snort	snare	snip	snag	snug	snake	snail	(50)
spoon	spell	spider	space	spill	span	spun	spin	spider	spoon	(60)
star	still	stand	stir	stun	stare	stand	stun	sting	still	(70)
swing	swept	sweep	swim	swell	swim	swing	sweep	swell	swear	(80)
scat	scooter	scale	scar	scold	scout	scare	scooter	scar	scout	(90)
sky	skit	sky	skirt	skiff	skirt	sky	skiff	skit	skirt	(100)

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Name_____ Date_____ Time 1 min._____

Checked by_____ Count_____ Errors_____ Correct_____

SAY WORDS: Consonant blends, random

prince	cradle	fresh	grand	trail	brick	grape	crash	trouble	friend	(10)
press	flag	clump	bleed	claim	glide	class	black	please	flash	(20)
slant	cry	stand	sweep	flipper	please	swept	small	plain	flat	(30)
slide	snail	clip	spoon	skit	blame	blank	scold	scooter	spell	(40)
blew	glare	pretty	free	sky	branch	swim	snake	plain	please	(50)
blame	green	friend	train	bring	trot	grass	blank	glance	smile	(60)
clump	flute	bridge	spider	blossom	fry	plane	glitter	crash	blow	(70)
class	smile	brand	grew	pry	frame	grape	grub	snare	black	(80)
scooter	swell	star	trap	please	glance	snip	span	branch	blame	(90)
flute	pretty	skit	flipper	bleed	slide	brick	trouble	blew	cradle	(100)

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Name_____ Date_____ Time___1 min.____

Checked by_____ Count_____ Errors_____ Correct_____

SEE TO MARK: Consonant Substitution

Circle the letter pair which will make a new word.

small __all	st dr ch		drink __ink	fl th sm		bring __ing	ch fr st		(15)
bring bri__	ch mp st		chick chi__	st ng mp		think thi__	mp ng ch		(30)
truck tru__	st ch nd		wish wi__	nd mp lk		brag __ag	sm fl th		(45)
silk si__	th ng ch		stick __ick	sm dr th		mop _op	br sm ch		(60)
rate _ate	st pr fl		just ju__	ck nd mp		sift si__	ck mp th		(75)
drink dri__	mp ft st		whip whi_	ch th ng		cot co_	rd rn th		(90)

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Name_____ Date_____ Time___1 min.____

Checked by _____ Count_____ Errors_____ Correct

See to Say: Rhyming Word Parts

Choose a word from Row 2 that rhymes with each word in row 1.

1	queen	vote	buzz	cake	ram	knock	(18)
2	does	bean	make	goat	sock	lamb	
1	learning	sing	bee	loan	rocket	sock	(36)
2	fling	pocket	burning	lock	flea	stone	
1	me	lake	toot	sail	rain	bean	(54)
2	steak	male	queen	suit	see	mane	
1	beat	read	soap	try	maid	laugh	(72)
2	speed	hope	feet	staff	sigh	fade	

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Name_____ Date_____ Time 1 min._____

Checked by_____ Count_____ Correct_____ Errors_____

SEE TO MARK: Variant Vowel Sounds

Circle word from pair with the same vowel sound as in preceding word.

room	good	clue	bounce	cousin	fowl	group	few	sprout	course	gourd	blouse	(16)
heard	fur	beard	head	beam	pet	country	ground	fun	love	sun	move	(32)
gone	fawn	bone	look	spoon	could	trouble	up	out	bowl	told	brow	(48)
fur	learn	true	straight	make	right	mew	foe	blue	toot	due	foot	(64)
soap	soot	note	shout	plow	would	fought	foe	paw	course	sought	tore	(80)
dough	pole	should	float	old	move	home	move	fold	move	sue	bone	(96)

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Name_____ Date_____ Time 1 min._____

Checked by_____ Count_____ Errors_____ Correct_____

1. SAY WORDS: Affixes Random
2. SEE TO MARK: Affixes Random

fresh refresh refreshing refreshed refresh fresh refresh refreshing (9)

comfort comfortable uncomfortable comfortable comfort uncomfortable (15)

press impress impressing impressed press impress impressed impressing (25)

depress depressing depressed press depressing depressed depressing (36)

fresh refresh refreshing refreshed refresh fresh refresh refreshing (45)

comfort comfortable uncomfortable comfortable comfort uncomfortable (51)

press impress impressing impressed press impress impressed impressing (61)

depress depressing depressed press depressing depressed depressing (72)

fresh refreshed comfort uncomfortable press impress depress depressing (80)

refreshing fresh comfortable comfort press impress depressed impressed (88)

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Name_____ Date_____ Time 1 min.

Checked by_____ Count_____ Errors_____ Correct_____

SEE TO MARK: Identifying Affixes

Circle the words in which the underlined part is an affix.

return	painless	export	player	worker	(10)
water	family	disloyal	impure	cheerful	(18)
carry	country	painful	quickly	ugly	(25)
behave	yellow	proudly	rerun	begun	(32)
baggage	alarm	under	polite	hidden	(37)
import	playful	bitter	monkey	sadly	(45)
canary	cheerless	different	worker	impress	(53)
return	velvet	music	hundred	retold	(60)

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Name_____ Date_____ Time 1 min.

Checked by_____ Count_____ Errors_____ Correct_____

WRITE WORDS: Prefixes - Add "im" to each root

proper	perfect	press	polite	(32)
_____	_____	_____	_____	
pure	prison	port	print	(59)
_____	_____	_____	_____	
proper	perfect	press	polite	(91)
_____	_____	_____	_____	
pure	prison	port	print	(118)
_____	_____	_____	_____	
proper	perfect	press	polite	(150)
_____	_____	_____	_____	

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Name_____ Date_____ Time 1 min._____

Checked by_____ Count_____ Errors_____ Correct_____

SEE TO SAY: Affixes- Building Words1

Say th affixed word which corresponds to each phrase.

_____ous - filled with dis_____ - not

_____ment - act or state of being _____ or— one who, thing, which

---

filled with mountains		filled with danger		filled with poison	(9)
filled with hazards		filled with humor		filled with fame	(18)
not obey	not agree	not loyal	not connect	not agree	(33)
not like	not comfort	not appear	not regard	not infect	(48)
act of moving	act of judging	state of agreeing		state of enjoying	(60)
state of being contented		state of being amused		state of agreeing	(69)
one who invents		one who protects		one who collects	(78)
things which reflects		things which projects		one who protects	(87)

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Name_____ Date_____ Time 1 min._____

Checked by_____ Count_____ Errors_____ Correct_____

SEE TO SAY: Defining Words

Say the correct word phrase which tells what each affixed word means.

_____ful - filled with re_____ - again

_____er - one who un_____ - not

joyful	painful	hopeful	thoughtful	cheerful	(15)
worker	singer	dancer	teacher	reader	(30)
rejoin	rebuild	rerun	reprint	redo	(40)
unhappy	unwilling	unlucky	unequal	unknown	(50)
refill	unfair	shameful	repaint	player	(62)
joyful	worker	untidy	rejoin	unhappy	(74)
painful	singer	rebuild	unwilling	hopeful	(87)
dancer	rerun	unlucky	thoughtful	teacher	(100)

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Name_____Date_____Time 1 min.____
Checked by_____Count_____Errors_____Correct___

SEE TO MARK: Heteronyms

Underline the two words in each pair of sentences which are spelled the same but pronounced differently.

1. I record the points for each team.
   I have a record of those points. (16)
2. She wanted to enter the beauty contest
   She didn't like the decision so she decided to contest it. (36)
3. She stepped on a sharp object and cut her foot.
   She did not object to the doctor's treatment of the cut. (59)
4. The archer aimed his bow carefully at the target.
   He will bow to the audience after he hits his target. (81)
5. An alternate is a substitute.
   They had to alternate days so they could use the gym. (99)
6. The cat was content after eating it's dinner.
   The content of the book was listed in the index. (119)
7. The soldier threatened to desert the army.
   The army marched across the hot desert. (135)
8. The wind blew down the trees during the storm.
   He had to wind the blue cord around the pole. (156)
9. They finally completed their school project.
   We need to project the picture on the screen over there. (175)
10. You find vegetables in the produce department.
    My vegetable plants did not produce much this year. (193)

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BIBLIOGRAPHY

Bates, S. and D.F. Bates. "and a child shall lead them:" Stephanies's Chart Story. TEACHING Exceptional Children, 1971, 3(3), 111-113.

Cohen, M.A. and G.L. Martin. Applying precision teaching to academic assessment. TEACHING Exceptional Children, 1971, 3(3), 147-150.

Haring, N. (director), L. Maddux, and D.A. Krug. Investigation of Systematic Instructional Procedures to Facilitate Academic Achievement in Mentally Retarded Disadvantaged Children. Final Report. Educational Resources Information Center, ERIC Document, ED 071 248, Sept., 1971.

Haring, N., and R.L. Schifelbusch. "Operant Methodology and Educational Technology in Special Education." Methods in Special Education. New York: McGraw-Hill Book Company, 1967.

Haughton, E. "Aims-Growing and Sharing." Paper presented at Let's Try Doing Something Else Kind of Thing, Educational Council for Exceptional Children, Arlington, Virginia, March 25-26, 1971. Educational Resources Information Center, ERIC Document ED 060 587.

_____, Great gains from small starts. TEACHING Exceptional Children, 1971, 3(3), 141-146.

Johnson, E.C. Precision teaching helps children learn. TEACHING Exceptional Children, 1971, 3(3), 106-110.

Kunzelmann, H.P., ed. Precision Teaching. Seattle: Special Child Publications, Inc., 1970.

_____, project manager. Progress Report II. Child Service Demonstration Programs in Seattle-Spokane-Tacoma for Precise Educational Remediation for Managers of Specific Learning Disabilities Programs. Olympia: Superintendent of Public Instruction, Division of Curriculum and Instruction, Special Services Section, July 1, 1972.

Lindsley, O.R. "From Skinner to Precision Teaching: The Child Knows Best". Paper presented at Let's Try Doing Something Else Kind of Thing, Educational Council for Exceptional Children, Arlington Resources Information Center, ERIC ED 060 581.

Lovitt, T., H.P.Kunzelmann, P.A. Nolen, and W.J. Hutten. "The Dimensions of Classroom Data," Journal of Learning Disabilities. 1968, 1(12), 710-21.

Pennypacker, H.S., C.H. Koenig, and O.R. Lindsley. Handbook of the Standard Behavior Chart. Kansas City, Kansas: Precision Media, 1972.

Phillips, D. "We Have a Successful Tool Now-Let's Use It!" Paper presented at Let's Try Doing Something Else Kind of Thing, Educational Council for Exceptional Children, Arlington, Virginia, March 25-26, 1971. Educational Resources Information Center, ERIC Document ED 060 581.

Precision teaching in perspective: an interview with Ogden R. Lindsley. TEACHING Exceptional Children, 1971, 3(3), 114-119.

Starlin, A. "Sharing a Message about Curriculum with My Teacher Friends." Paper presented at Let's Try Doing Something Else Kind of Thing, Educational Council for Exceptional Children, Arlington, Virginia, March 25-26, 1971. Educational Resources Information Center, ERIC Document ED 060 587.

Starlin, C. Peers and Precision. TEACHING Exceptional Children, 1971, 3(3), 129-140.